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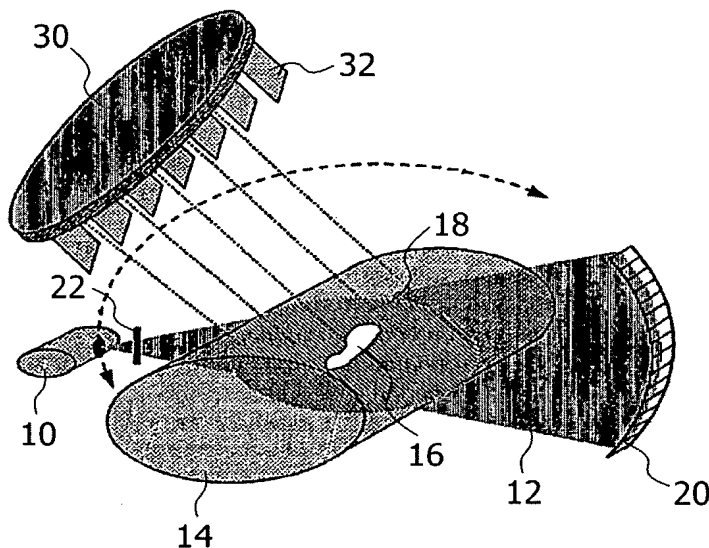
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(54) Title: DEVICE AND METHOD FOR MAPPING THE DISTRIBUTION OF AN X-RAY FLUORESCENCE MARKER



(57) Abstract: The invention relates to a method and a device for determining the distribution of an X-ray fluorescence (XRF) marker (16) in a body volume (14). The body volume (14) is irradiated with a beam of rays (12) from an X-ray source (10) with a first ray component with a quantum energy just above and a second ray component with a quantum energy just below the K-edge of the XRF marker (16). Secondary radiation emitted from the body volume (14) is detected in a location-resolved way by a detector (30). To separate the X-ray fluorescence components in the secondary radiation from background radiation, the body volume is irradiated for a second time with a beam of rays from which the first ray component has been substantially removed by a filter (22) made from the material of the XRF marker.



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